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கல்விப் பொதுத் தராதரப் பத்திர (உயர் தர)ப் பரீட்சை, 2018 ஓகஸ்ற்
General Certificate of Education (Adv. Level) Examination, August 2018

18.08.2018 / 0830 – 1100

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பொதுச் சாதாரணப் பரீட்சை
Common General Test

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පැය දෙකයි මිනිත්තු තිහයි
இரண்டு மணித்தியாலமும் முப்பது நிமிடமும்
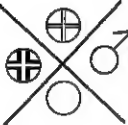*Two hours and thirty minutes*

Instructions:
* *Answer **all** the questions.*
* *Use of calculators is **not** allowed.*
* *Write your **Index Number** in the space provided in the answer sheet.*
* *Instructions are given on the back of the answer sheet. Follow those carefully.*
* *In each of the questions **1** to **60**, pick one of the alternatives from (1), (2), (3), (4), (5) which is **correct** or **most appropriate** and **mark your response on the answer sheet with a cross** (×) in accordance with the instructions given on the back of the answer sheet.*

1. Where was the Commonwealth Games 2018 held?
   (1) Brisbane, Australia
   (2) Gold Coast, Australia
   (3) Sydney, Australia
   (4) Glasgow, Scotland
   (5) Birmingham, England

2. Who was the royal family member representing the Britain's Queen participated as the chief guest of the 70th Anniversary celebration of Sri Lanka's Independence Day on 4th of February 2018?
   (1) Prince Andrew
   (2) Prince Charles
   (3) Prince Harry
   (4) Prince William
   (5) Prince Edward

3. Robert Mugabe being the President of this African country for 37 years, resigned from his post in November 2017.
   (1) Zimbabwe
   (2) South Africa
   (3) Mozambique
   (4) Kenya
   (5) Nigeria

4. This renowned English scientist who wrote the popular science book "A Brief History of Time" passed away on 14th March 2018.
   (1) John Young
   (2) Arthur C. Clarke
   (3) Carl Segan
   (4) Trevor Baylis
   (5) Stephen Hawking

5. The World Health Organization has launched programmes to minimize non-communicable diseases, which result from a combination of genetic, physiological, behavioural and environmental factors. Which of the following is **not** a non-communicable disease?
   (1) Cancer
   (2) Cardiovascular diseases
   (3) Measles
   (4) Chronic Kidney disease
   (5) Diabetes

6. The National Glaucoma Week took place from March 11 to 17 in 2018. Glaucoma is a disease that affects this organ of the human body.
   (1) Eye
   (2) Ear
   (3) Tongue
   (4) Joints
   (5) Liver

7. Non-biodegradable waste is a major problem that Sri Lanka is currently facing. Which of the following is a biodegradable waste?
   (1) Metal
   (2) Synthetic fibre
   (3) Polythene
   (4) Food waste
   (5) Glass

8. Sri Lanka has announced its support to the 'One Belt, One Road' (OBOR) initiative that focuses on connectivity and cooperation between Eurasian countries. What is the country that proposes OBOR?
   (1) China
   (2) India
   (3) Russia
   (4) Australia
   (5) United States of America

9. The Department of Motor Traffic recently introduced two new classes of vehicles for registration, following the Amendment No. 18 of the Motor Traffic Act 2017. What is one of these classes of vehicles?
   (1) Two wheel tractors   (2) Three-wheelers   (3) Light motor lorries
   (4) Heavy motor lorries   (5) Quadricycles

10. What is the mandatory percentage of quota for women representation in local government bodies required by the Local Authorities Election Act in 2017?
    (1) 5   (2) 10   (3) 20   (4) 25   (5) 50

11. Aviation operations and services of the domestic airport located in this city were commenced in March 2018.
    (1) Polonnaruwa   (2) Trincomalee   (3) Batticaloa   (4) Sigiriya   (5) Habarana

12. Name the captain of Australian cricket team who has been banned from playing international cricket for a period of one year by the Australian Cricket Board following ball tampering scandal in this year.
    (1) Steve Smith   (2) David Warner   (3) Cameron Bencroft
    (4) Shane Warne   (5) Steve Waugh

13. Paris climate accord is an agreement within the United Nations Framework Convention on Climate Change dealing with greenhouse gas emissions, mitigation, adaptation and finance in order to reach certain standards in the year 2020. Which country withdrew from this agreement in June 2017?
    (1) United Kingdom   (2) United States of America   (3) France
    (4) Russia   (5) China

14. Sri Lankan government signed a memorandum of understanding on Employment Permit System (EPS) with the government of a certain country in November 2017. EPS is a transparent recruitment system implemented by the government of that country to recruit Sri Lankan workers for employment. Name the country.
    (1) India   (2) North Korea   (3) South Korea   (4) China   (5) Oman

15. Which organization does this logo represent?
    (1) Organization of Petroleum Exporting Countries (OPEC)
    (2) Organization for Economic Co-operation and Development (OECD)
    (3) International Organization for Migration (IOM)
    (4) United Nations Organization (UNO)
    (5) World Trade Organization (WTO)

16. What is 12.5% expressed as a fraction?
    (1) $\frac{1}{8}$ (2) $\frac{1}{5}$ (3) $\frac{1}{4}$ (4) $\frac{5}{12}$ (5) $\frac{1}{2}$

17. The operation $\oplus$ is defined by $x \oplus y = x + y - 1$ for any integers x, y. What is the value of $-1 \oplus (1 \oplus 2)$?
    (1) -2 (2) -1 (3) 0   (4) 1   (5) 2

18. 900 people have visited a museum from Monday to Friday in a certain week. Of which $\frac{1}{3}$ visited on Monday and $\frac{5}{12}$ visited on Tuesday. How many visited during the other three days?
    (1) 150   (2) 200   (3) 225   (4) 350   (5) 400

19. A salesman has a target of achieving 200 sales a month on average in a year. He has achieved 1740 sales at the end of third quarter. How many sales must he do during the last quarter to reach the target?
    (1) 550   (2) 600   (3) 660   (4) 760   (5) 1060

20. A machine produces items at a constant rate of 240 items per hour. How many items would two such machines produce in 35 minutes?
    (1) 105   (2) 140   (3) 210   (4) 280   (5) 315

21. U, V, X, Y and Z are five cities. V is 4 km east of U, X is 3 km north of V, Y is 12 km east of X and Z is 9 km north of Y. What is the straight line distance between U and Z?
    (1) 10 km   (2) 20 km   (3) 28 km   (4) 30 km   (5) 40 km

22. A test was given in a class having 30 girls and 20 boys. The average test score for girls was 80 and the average test score for boys was 70. What was the average test score of the students in this class?
    (1) 76   (2) 75   (3) 74   (4) 73   (5) 72

23. In a school, 75% of the students who sat the G.C.E.(O/L) examination had passed all 9 subjects. Of the remaining students, 60% had passed 7 or 8 subjects. What percentage of students in the school had passed fewer than 7 subjects?
    (1) 0   (2) 10   (3) 15   (4) 30   (5) 45

24. Each of the four children A, B, C and D in a family receives a monthly allowance in the proportion of 5:2:4:3 respectively. If C gets rupees 2000 more than B gets, what is D's monthly allowance?
    (1) Rs.1500   (2) Rs.2000   (3) Rs.2500   (4) Rs.3000   (5) Rs.3500

25. The manufacturing cost of a certain item is rupees 150 per item for the first 1000 items. Thereafter the cost for each of subsequent item is rupees 50. How much will it cost in rupees to manufacture 5000 items?
    (1) 300000   (2) 350000   (3) 450000   (4) 600000   (5) 750000

26. A train travelling at the speed 30 $km\,h^{-1}$ enters a tunnel that is 500 m long. The length of the train is 250 m. How long does it take the whole train to pass through the tunnel?
    (1) 1 minute   (2) 1.5 minutes   (3) 2 minutes   (4) 2.5 minutes   (5) 3 minutes

27. A listed price of a certain book was Rs. 900.
    1000 copies of this book were sold as follows:
        * 60% were sold at 50% discount,
        * 20% were sold at 30% discount and
        * the remainder were sold at the listed price.
    What was the total revenue in rupees?
    (1) 500000   (2) 510000   (3) 550000   (4) 576000   (5) 710000

28. Two trains A and B leave the station X at the same time and travel in the same direction on parallel rail roads to reach the station Y located 75 km away from X at the same time. Train A travels 50% faster than B. Train B is travelling non-stop and train A has a total of 25 minutes stoppage time in between X and Y. What is the speed of train B?
    (1) 50 $km\,h^{-1}$ (2) 55 $km\,h^{-1}$ (3) 60 $km\,h^{-1}$ (4) 65 $km\,h^{-1}$ (5) 70 $km\,h^{-1}$
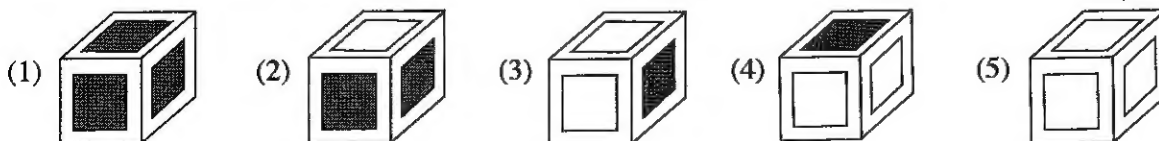
29. Which one of the following figures is a rotation of this figure?

(1)   (2)   (3)   (4)   (5)
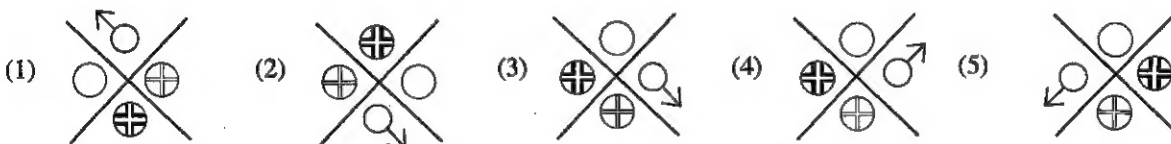
30. Following is a net for a cube.
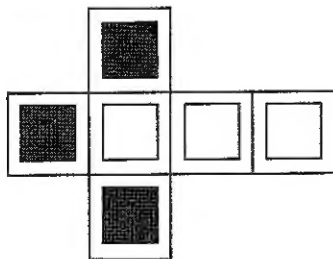
Which of the following figures does not represent the cube made from the above net?

(1)   (2)   (3)   (4)   (5)

31. Kamal started making envelops as self-employment and planned to make one bundle per day. During the first day he spent 4 hours to make the bundle. Due to learning effects, his efficiency doubled per day. He made 2 bundles per day from the third day onwards. How long did he work on the fourth day?

    (1) 30 minutes   (2) 1 hour   (3) 2 hours   (4) 4 hours   (5) 8 hours

● Questions No. **32** and **33** are based on the following:

    The following two graphs show the profit and production cost per year over the last 5 years of a firm manufacturing consumable goods.
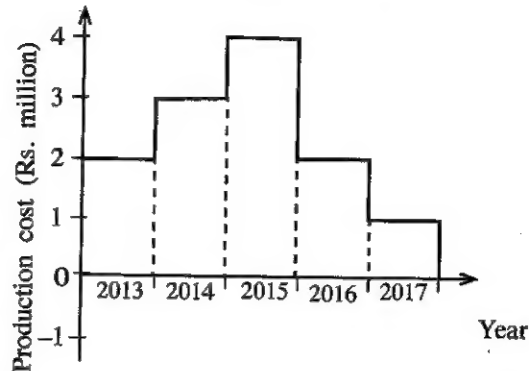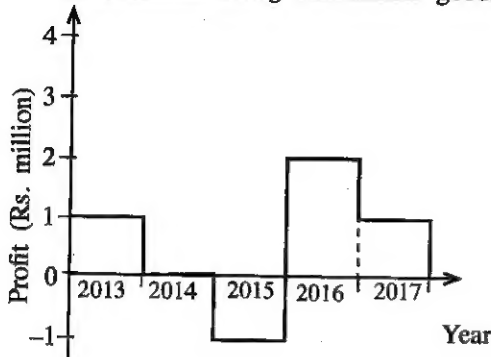
32. In which year did the firm generate the highest revenue by selling the goods during last 5 years?

    (1) 2013   (2) 2014   (3) 2015   (4) 2016   (5) 2017

33. What is the total revenue generated by the firm within the last 5 years?

    (1) Rs. 5 million   (2) Rs. 10 million   (3) Rs. 15 million   (4) Rs. 20 million   (5) Rs. 25 million

● For questions No. **34** and **35**, refer the following:

Six pebbles labelled *A, B, C, D, E, F* are arranged circularly so that *E* and *F* are adjacent but *A* and *B* are non-adjacent and, *C* and *D* also are non-adjacent.

34. Which two pebbles are on the same side of the line joining *A* and *F* if *B* is adjacent to both *C* and *F*?

    (1) *B* and *C*   (2) *B* and *D*   (3) *B* and *E*   (4) *C* and *D*   (5) *C* and *E*

35. If *A* is adjacent to both *D* and *E*, which pair is adjacent to *F*?

    (1) *B* and *C*   (2) *B* and *D*   (3) *B* and *E*   (4) *C* and *E*   (5) *D* and *E*

● Questions No. **36** to **38** are based on the following:

A, B, C, D and **E** are five security officers of a company who work on shifts. Only one officer present in each shift. They come to work from Monday to Friday. Each day has three shifts: morning, afternoon and night. Thus the whole week is divided to 15 shifts, where each officer is doing 3 shifts. Further, no officer is doing 2 consecutive shifts. Regarding a particular week, the following information is known.

    * **A** has worked only on Wednesday and Thursday.
    * **B** has done only night shifts, which were on three consecutive days.
    * **C** has done only afternoon shifts, which were on three consecutive days.
    * **B** has taken the following shift after **D**'s shift on two occasions.

36. Who did the Thursday afternoon shift?

    (1) **A**   (2) **B**   (3) **C**   (4) **D**   (5) **E**

37. Who did the Monday morning shift?

    (1) **A**   (2) **B**   (3) **C**   (4) **D**   (5) **E**

38. What is the total number of night shifts done by **D** and **E**?

    (1) 0   (2) 1   (3) 2   (4) 3   (5) 4

● Question No. **39** and **40** are based on the following conversation of three people.
    1st person :   Mrs. Perera had been abroad.
    2nd person : Actually she had visited three countries or perhaps more.
    3rd person :   Not so, she had never visited two countries.

39. If Mrs. Perera visited a country she had not been before, number of persons speaking truth in above conversation will decrease. How many countries had she visited till today, if this is the case?
    (1) 0   (2) 1   (3) 2   (4) 3   (5) 4

40. Mrs. Perera who recently came from abroad observes that only one person is speaking truth in the above conversation. How many countries had she visited?
    (1) 0   (2) 1   (3) 2   (4) 3   (5) 4

41. Which of the following pairs of observation and conclusion might **not** be valid, when the two were interchanged?

	Observation	**Conclusion**
(1)	X is a Wednesday.	X + 1 is a Thursday.
(2)	X is even.	X + 1 is odd.
(3)	X is measured in kilograms.	X + 1 is measured in kilograms.
(4)	X is a leap year.	X + 1 is a common year.
(5)	X = 2X	X = 0

● In questions No. **42** and **43**, a statement and five observations are given. Which of the observations, if true, will most seriously weaken the credibility of the given statement?

42. Statement: Rainfall increases humidity in coastal areas.
    (1) Galle was more humid than Kandy in the dry season.
    (2) Kandy was more humid than Galle in the dry season.
    (3) Humidity decreases when going from Galle to Kandy.
    (4) Galle was less humid in rainy season than in dry season.
    (5) Kandy was more humid in rainy season than in dry season.

43. Statement: This year, the company 'Naranbiq' has increased its quota for women representation in the director board.
    (1) Naranbiq hired less female workers this year than in the last.
    (2) Naranbiq's director board has more male members this year than in the last.
    (3) Naranbiq's director board has less female members this year than in the last.
    (4) During the last two years, Naranbiq has not promoted any female worker to the post of director.
    (5) Naranbiq's only female director for four years resigned very recently.

44. Select the conceptually different sequence.
    (1) 2015 ⟶ 2016 ⟶ 2017 ⟶ 2018
    (2) Breakfast ⟶ Lunch ⟶ Tea ⟶ Dinner
    (3) North ⟶ East ⟶ South ⟶ West
    (4) 12 00 noon ⟶ 6 00 p.m. ⟶ 12 00 midnight ⟶ 6 00 a.m.
    (5) North-West ⟶ South-West ⟶ South-East ⟶ North-East

45. A military group received a secret message XBSEIUJX which they deciphered as WITHDRAW. Which of the following is deciphered to the word CONCEALED?
    (1) PDBMFDQOD   (2) EFMBFDOPD   (3) MDEBDFPOF
   (4) PBDMBQQOQ   (5) PRDMRPOQP

● Questions **46** and **47** are based on the following information related to five children **D**, **M**, **N**, **T** and **V**:
* **M** is lighter than **V**.
* **T** is heavier than **N**.
* **D** is heavier than **M**.
* **N** and **V** are equal in weight.

46. Which of the following could be deduced from the above?
   (1) **T** is heavier than **D**.
   (2) **V** is lighter than **D**.
   (3) **T** is lighter than **V**.
   (4) **D** is lighter than **N**.
   (5) **T** is heavier than **M**.

47. Which of the following statements can be concluded using only the above data?
   (1) It is possible to determine the second heavier person.
   (2) It is possible to determine both the lightest person and the heaviest person.
   (3) It is not possible to determine either the lightest person or the heaviest person.
   (4) It is possible to determine the lightest but not the heaviest person.
   (5) It is possible to determine the heaviest person but not the lightest person.

48. The following graph shows the percentages of school candidates by stream who were eligible for university entrance in the G.C.E. (A/L) examination 2017.

What is the stream having the **least** percentage of **ineligible** candidates for university entrance?

   (1) Bio Science
   (2) Physical Science
   (3) Commerce
   (4) Arts
   (5) Bio Systems Technology
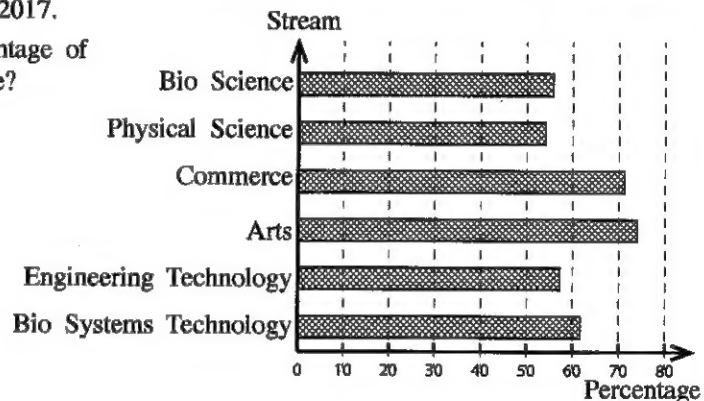
● In questions No. **49, 50** and **51**, a conclusion and an information set of three statements numbered I, II and III are given.
* If the conclusion can be made by using only one statement, select *A*.
* If the conclusion can be made by using I and II together, select *B*.
* If the conclusion can be made by using I and III together, select *C*.
* If the conclusion can be made by using II and III together, select *D*.
* If the conclusion can be made by using I, II and III together, select *E*.

49. Conclusion : Port city is being developed on a man-made earth dune covering an area of 2.69 sq. km in the sea of port area.
   I - Port city project is approved by previous and present governments.
   II - China and Sri Lanka have signed memorandum of understanding on this project.
   III - Some environmentalists and politicians are concerned about this project.
   (1) *A*   (2) *B*   (3) *C*   (4) *D*   (5) *E*

50. Conclusion : Music lessens mental stress.
   I - Doctors advise to occupy with hobbies including listening to music.
   II - Walking and diet control improve health of heart patients.
   III - Strain caused by mental stress would be unwound by music therapy.
   (1) *A*   (2) *B*   (3) *C*   (4) *D*   (5) *E*
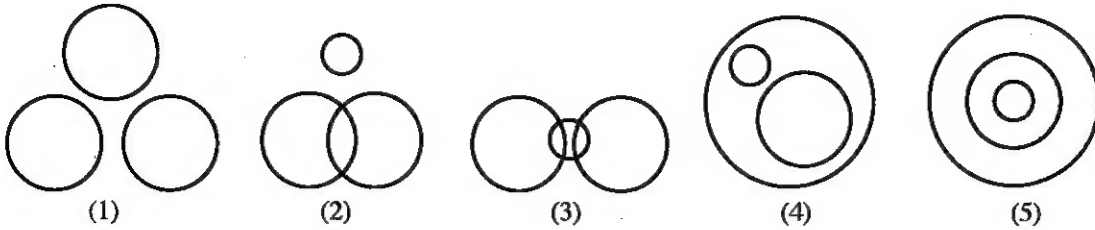
51. Conclusion : Dengue is a dangerous disease.
   I - Dengue is caused by Dengue virus.
   II - Dengue patients possess very high fever continuously.
   III - Unattended Dengue patients succumb to death.
   (1) *A*   (2) *B*   (3) *C*   (4) *D*   (5) *E*

52. Which one of the following diagrams represents the relationship between Professionals, Doctors and Engineers?

(1)　　　　(2)　　　　(3)　　　　(4)　　　　(5)

● Questions No. **53** and **54** are based on the following paragraph.

Diabetic centres are being established in general hospitals in Sri Lanka. In each centre diabetic patients are being examined by specialists and a report is submitted annually on their physical measurements, blood and urine analysis on lipid profile, blood sugar and urine micro-albumin levels. The report also consists of present treatments and future suggestions.

53. This passage describes about
    (1) different kinds of non-infectious diseases.
    (2) past and present treatments for patients.
    (3) different modes of transferring diabetism from mother to the child.
    (4) blood, urine and X-ray reports obtained at diabetic centres.
    (5) diabetic centres and their functions.

54. Which of the following is **not** explicitly said in the paragraph?
    (1) Different kinds of diabetic diseases.
    (2) Different tests for diabetic patients.
    (3) Present treatment the patient is undergoing.
    (4) Blood and urine samples tested for certain parameters.
    (5) Diabetic centres established at general hospitals.

● In each of the questions No. **55** and **56**, five short passages, each with three statements, are given. In only one of the passages the three statements can be rearranged in order to show a logical relationship. Select the passage which contains the statements that can be rearranged to show a logical relationship.

55. (1) Alarm of the table clock is not ringing due to a fault of the clock. Mother sets the alarm of the table clock before going to sleep. Nobody wakes up at 5.00 a.m.
    (2) Alarm of the table clock is ringing at 5.00 a.m. Daughter sets the alarm of the table clock before going to sleep. Mother wakes up at the alarm to go to hospital.
    (3) Machineries are used for paddy cultivation. Paddy harvesting machine has arrived. The job is done in a much shorter time.
    (4) Paddy harvesting machine is harvesting the paddy. Machineries are used nowadays for paddy cultivation. It is cheaper to use machineries.
    (5) Farm machineries are used not only for paddy harvesting but for several purposes of cultivation. Machineries are cheaper. Machineries are quicker.

56. (1) By distillation of toddy, arrack is manufactured. Toddy is also consumed directly. Government intends to reduce consumption of cigarettes and hard liquor.
    (2) Toddy consists of alcohol and very little protein, sugar, vitamins and minerals. Arrack consists mainly of alcohol. Sweet toddy (unfermented) consists mainly of sugar and proteins, vitamins and minerals.
    (3) Sweet toddy and toddy are extracted from Coconut, Kitul and Palmyrah. Coconut is grown throughout Sri Lanka. Palmyrah is grown in North-East and Kitul in up country of Sri Lanka.
    (4) Heavy rain causes flood and landslides. Government pays compensation to affected people. Due to flood and landslides houses are damaged and at times it causes injury and death to the people.
    (5) Landslides due to heavy rain occur mainly in hill country. Heavy flood causes house damage due to heavy rain. Heavy wind also causes damage to houses and death to the people.
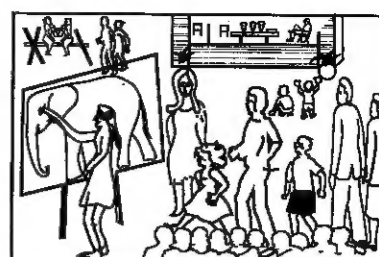
57. Six pictures related to a particular incident are given below. Choose the response which arranges the pictures in a correct sequence.
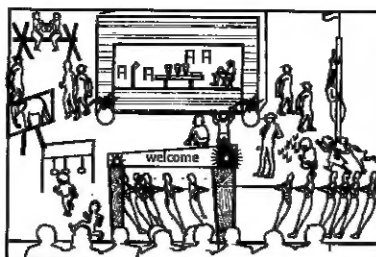
(1) *ABCDEF*   (2) *ABDECF*   (3) *ABECDF*   (4) *BADECF*   (5) *BAEDCF*

● Questions No. **58, 59** and **60** are based on the parts of a conversation given below that took place between a electricity meter reader and a lady at her home, but these are not in the correct sequence.

A: Good morning meter reader, please go ahead.

B: Good morning madam, shall I come in to take the electricity meter reading?

C: Why is the amount in this time higher than the usual?

D: The amount is high because the reading has exceeded the number of concessionary units.

E: What is wrong with him?

F: He is having continuous fever with high temperature and suspected for Dengue.

G: I see that electricity meter surroundings are untidy and covered with cob-webs.

H: Here is the electricity statement with meter readings, the amount to be paid and arrears, if any.

I: I am sorry that I could not keep the place clean as I was busy with my brother who is sick and hospitalized.

J: As far as possible you have to switch off unnecessarily burning of bulbs, use energy saving LED bulbs, reduce the use of high electricity consuming appliances including the ceiling fan.

K: What are the methods to reduce the consumption of electricity?

L: Thank you!

58. In the conversation, what are the parts made by the meter reader?
   (1) *ADEGHJ*   (2) *ADEHIJ*   (3) *BDEGHJ*   (4) *BDFGHJ*   (5) *BDFGJK*

59. In the conversation, what are the parts made by the lady?
   (1) *ACFIKL*   (2) *ACHIKL*   (3) *AFGIKL*   (4) *BCFIKL*   (5) *BCHJKL*

60. Select the most logical sequence of the conversation.
   (1) *ABGIEFHCKJDL*   (2) *ABHCGIEFDKJL*
   (3) *BAGIEFHCDKJL*   (4) *BAGIHCEFDKJL*
   (5) *BAHCGIEFDKJL*

* * *